

### **Abstract of the Disclosure**

**[0068]** Modifications to the surface of polyvinyl alcohol-based films are disclosed that result in improved adhesion to optical materials. Specifically, the surface chemistry of the polyvinyl alcohol-based film is altered to include fluorine bonds, which surprisingly improve direct adhesion of the film to materials such as optical thermoset resins, without the use of additional coatings or multilayer sandwich construction. Embodiments of this invention for incorporation of polarizer films in thermoset resin lenses are described. A method of exposing the film to indirect, reduced-pressure plasma to achieve these surface modifications, and an exemplary holder for the film during such processing, are disclosed.